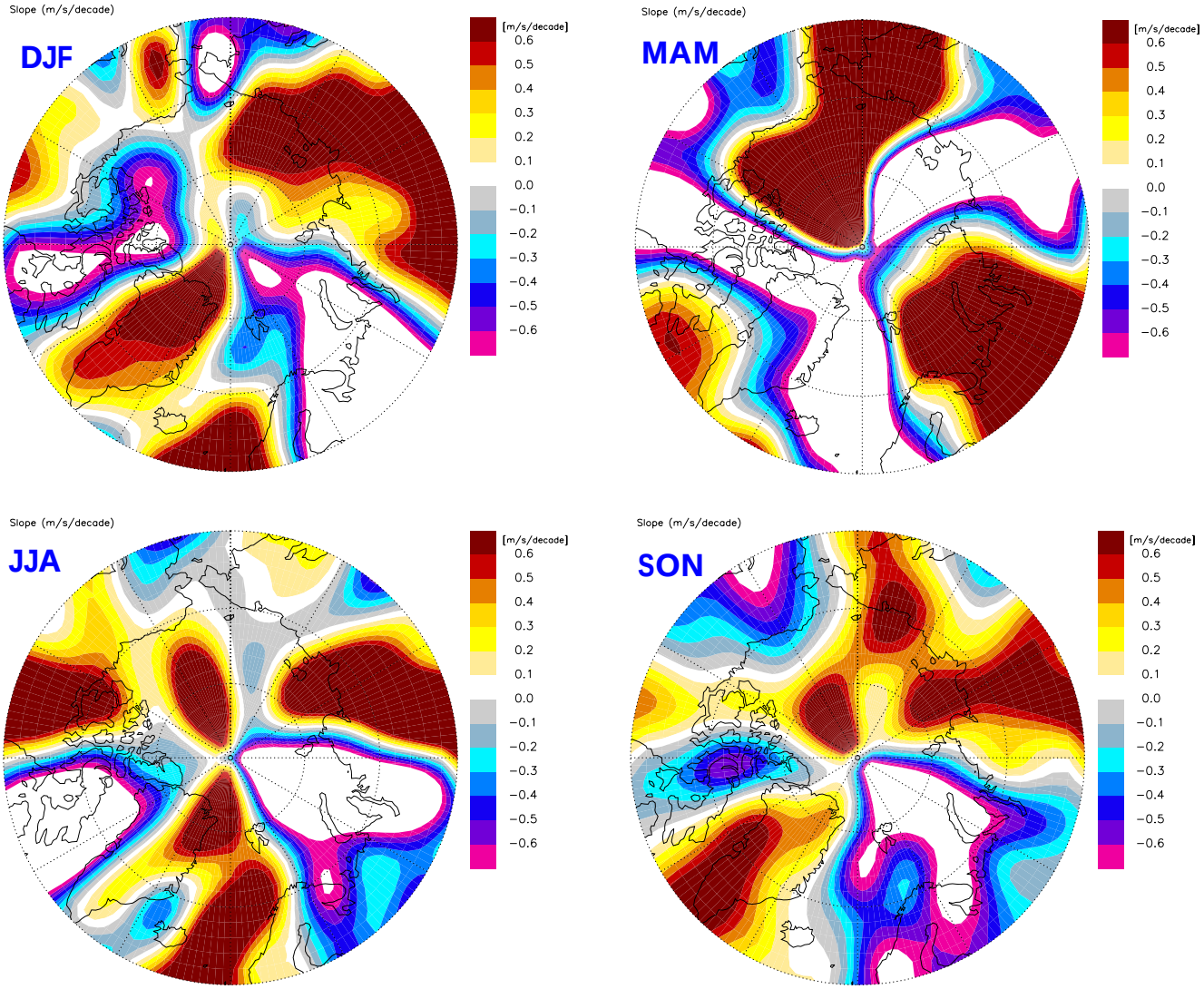
Decadal Trends in NCEP v-component Winds 1000-300 mb



Trends in NCEP Reanalysis v-component winds (m s^{-1} $dec.^{-1}$) in the 1000-to-300 mb layer for each season from 1979 to 1998. Patterns are consistent with observed decreased SLP over the pole. Comparison with patterns of trends in poleward advective heating suggests that heating trends are caused primarily by changes in the circulation. In most cases areas of increased heating correspond to increased southerly winds, and areas with cooling coincide with stronger northerly winds. Changes in the thickness gradient also play a role.